

*Phyllonorycter corylifoliella*, but to me it looked like *P. leucographella*. However, I had not heard of any previous record of this species feeding on this foodplant, so I photographed it and e-mailed the photograph to John Langmaid who confirmed my identification.

On the 14 October I visited Priory Park, St Neots, Huntingdonshire with the intention of finding *Cameraria ohridella* on the Horse Chestnuts in the park. After a lengthy search I eventually found a few mines on two trees. I thought while I was in the park I would record any other mines I saw, so I searched out as many different tree species I could find. Several London Plane have been planted in the park, so I checked them for *Phyllonorycter platani*. I then noticed several mines on the top of the leaves, which were identical to the mine previously seen. These proved to be further examples of *P. leucographella*. The large leaves on London Plane were supporting up to three individual mines along the mid-rib and on one leaf a mine was over the middle of one of the major veins to the side of the mid-rib.— BARRY DICKERSON, 27 Andrew Road, Eynesbury, St Neots Cambridgeshire PE19 2QE (E-mail Barry@eynesbury27.freeserve.co.uk).

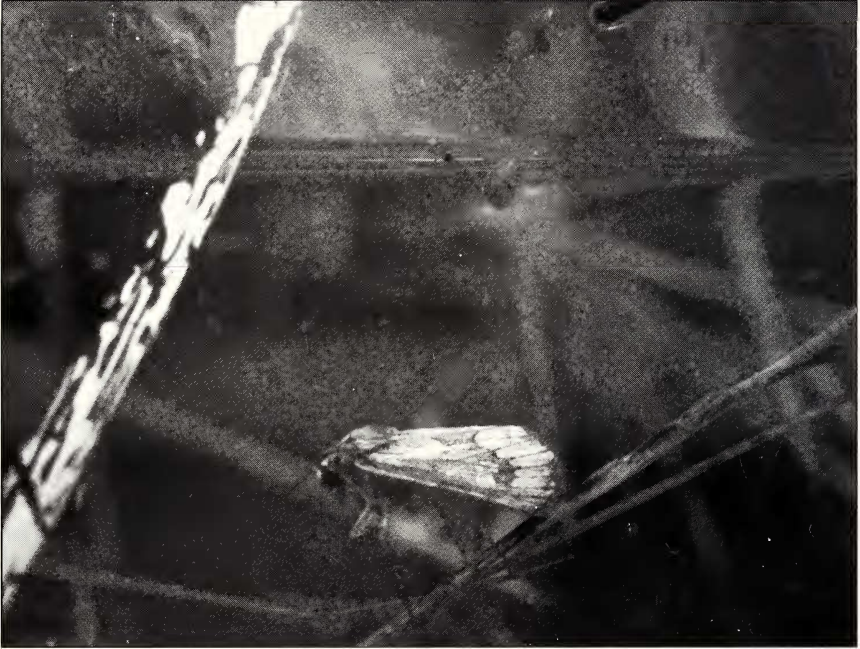
**A note on the Sandhill Rustic *Luperina nickerlii demuthi* Goater & Skinner (Lep: Noctuidae), especially its apparent capacity to survive under water**

The Sandhill Rustic *Luperina nickerlii demuthi* Goater & Skinner is abundant on salt marshes in south-east England, where it has been recorded from Essex, Kent and Suffolk. It comes readily to light (after about 11.30pm), especially to light traps placed in the middle of saltmarshes where the larval foodplant *Puccinellia maritima* occurs in abundance. Here it is by far the commonest moth; for example on 30 August 1998 on saltmarsh near West Mersea, 31 *demuthi* (three females, 28 males) came to 80 watt m.v. light between 11.30pm and 12.30am compared with 10 other moths consisting of four species.

I have never seen any of the other three British Isles *nickerlii* subspecies (*gueneei*, *knilli* and *leechi*) feed from flowers, although they have a functional proboscis which they use to imbibe water. However, I have a single sighting of a male *demuthi* taking nectar from Sea Lavender *Limonium vulgare* Miller at West Mersea on the same date; this plant is abundant on many saltmarshes in south-east England.

The areas from which *demuthi* is recorded are often under water at high tide. I once heard my generator come to a halt when the tide rose around it at The Swale, a saltmarsh in Kent. The moths must therefore be able to cope with regular submergence. Indeed, it is noticeable that, if trapping at low tide (the safest time to be out on the saltmarsh at night), *demuthi* flies along the runnels and up over the bank edges to the lamps. The estuary sites where *demuthi* is found may be as much as 7-8 km from the open sea, so that there is probably some reduction in the salinity of the water in comparison with the open sea.

In order to test tolerance by *demuthi* of salt water immersion, I took four adult male *demuthi* collected from West Mersea home to Cornwall. They were placed on a tray of growing *Puccinellia maritima*, each one settling on a grass stem, and the tray lowered into a large aquarium. I collected sea water from the Hayle estuary in north Cornwall and mixed it with a small amount of tap water to reduce the salinity.



**Figure 1.** male *Luperina nickerlii demuthi* Goater & Skinner on *Puccinellia maritima* in saline water inside an aquarium. The surface of the water is clearly visible above a few centimetres above the moth.

The sea water was then poured slowly into the tank to replicate the rising tide, gradually submerging the *Puccinellia* and the moths, but leaving the highest stems out of the water. The following observations were made:

Moth 1 - stayed where it was as the water rose above it

Moth 2 - climbed up a tall *Puccinellia* stem as the water rose and remained above the water

Moth 3 - climbed up a tall *Puccinellia* stem as the water rose and remained above the water

Moth 4 - climbed up a tall *Puccinellia* stem and then crawled back down again a few centimetres under the water where it remained for the duration of the experiment (Figure 1).

I kept the water in the tank for 30 minutes to replicate high tide on the saltmarsh, before gradually lifting the tray of *Puccinellia* and the moths out of the tank. The moths appeared to be unharmed by the experience, although of course the submergence may have reduced their life expectancy.— ADRIAN SPALDING, Tremayne Farm Cottage, Praze-an-Beeble, Camborne, Cornwall.

### **Common Rustic *Mesapamea secalis* (L.) egg-laying on Sand Couch-grass *Elytrigia juncea***

I came across a female *Mesapamea* species laying eggs on Sand Couch-grass *Elytrigia juncea* close to the sea on Loe Bar, Cornwall, on 19 August 2005. Examination of the grass stem showed that 8 eggs had been laid on the inside surface of a sheath above the first stem node above ground level. Genitalia examination showed that the moth was in fact Common Rustic *Mesapamea secalis* (L.). I can find no other record of this foodplant for *M. secalis*. Emmet (1991. Chart showing the Life History and Habitats of the British Lepidoptera. In A.M. Emmet & J. Heath. in *The moths and butterflies of Great Britain and Ireland*. Harley Books. Colchester) gives grasses (Gramineae) as well as *Luzula pilosa*, although Crafer (2005. *Foodplant List for the Caterpillars of Britain's Butterflies and Larger Moths*. Atropos Publishing. Meltham.) lists *M. secalis* as feeding generally from *Elytrigia* sp., as well as from *Holcus mollis*, *Festuca pratensis*, *F. ovina*, *F. arundinacea* and *Deschampsia cespitosa*. (Crafer's list may include foodplants used in captive breeding or on the continent).— ADRIAN SPALDING, Tremayne Farm Cottage, Praze-an-Beeble, Camborne, Cornwall TR14 9PH.

### **Six-metre grass margins and butterflies**

A joint project between Butterfly Conservation (Cambridgeshire and Essex Branch), NIAB and RSPB started at the RSPB farm in Cambridgeshire in Spring 2004 and aims to find out whether standard grass margins, that tend to be dominated by vigorous species such as Cocksfoot *Dactylis glomerata*, can be made more attractive to a range of common grassland butterflies. A set of 50 metre long margin experiments were set up to explore the impact of adding flowering plants and comparing the effects of using wild and cultivated seed. Six replicates of four different treatments, native grasses, native grasses with native wildflowers, cultivar grasses, and cultivar grasses with cultivars of wildflowers, were established in the spring of 2004 with monitoring taking place from the Spring of 2005. Adult butterfly numbers were counted using the transect method four times a week, when possible, during the peak flight period of June to the end of July. Far more butterflies were observed on the native grasses and wildflower margins (Table 1) than on any of the other treatments.